

WHAT IS CLAIMED IS:

- ✓ 1. An inflatable display comprising:
- (a) an inflatable balloon;
 - (b) a projector having a projection lens;
 - (c) an internal support structure that supports:
 - (i) said inflatable balloon; and
 - (ii) said projector so that said projection lens is eccentrically disposed within said inflatable balloon; and
 - (d) an external support structure that supports said internal support structure.
2. The inflatable display of claim 1 wherein said inflatable balloon has a first side and a second side and said projection lens is deployed within said first side to project onto said second side.
3. The inflatable display of claim 1 wherein said inflatable balloon has a central axis and said projection lens is deployed within said inflatable balloon eccentric to said central axis.
4. The inflatable display of claim 1 wherein said internal support structure can rotate in relation to said external support structure.

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5. The inflatable display of claim 1 wherein said external support structure is mechanically connected to said internal support structure substantially on said central axis.

6. The inflatable display of claim 1 wherein said internal support structure includes:

- (a) a curved support member that is mechanically connected to said inflatable balloon; and
- (b) a support arm that is mechanically connected to both said curved support member and said projector.

7. The inflatable display of claim 6 wherein said curved support member assumes the configuration of a closed loop.

8. The inflatable display of claim 6 wherein said curved support member assumes the configuration of a ring.

9. The inflatable display of claim 7 wherein: said closed loop is configured to fold; and said internal support structure further includes a folding mechanism.

10. The inflatable display of claim 9 wherein said folding mechanism includes a linear actuator.

11. The inflatable display of claim 9 further comprising:

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- (a) a wind gauge; and
- (b) a control circuitry that is configured to control said folding mechanism in response to an output of said wind gauge.

12. The inflatable display of claim 9 wherein:

- (a) said support arm includes a first support arm, a second support arm, a third support arm;
- (b) said second support arm includes a first portion and a second portion that are connected by a first hinge; and
- (c) said third support arm includes a third portion and a fourth portion that are connected by a second hinge.

13. The inflatable display of claim 12 wherein said support arm includes a fourth support arm.

14. The inflatable display of claim 13 wherein:

- (a) said first support arm and said fourth support arm substantially lie in a first plane; and
- (b) said second support arm lies in a second plane and said third support arm lies in a third plane, wherein said second plane is substantially parallel to said third plane and said second plane is substantially perpendicular to said first plane.

15. The inflatable display of claim 14 wherein said projector is disposed between said second plane and said third plane.

16. The inflatable display of claim 12 wherein said folding mechanism includes: a first linear actuator that is mechanically connected to said first portion and said second portion; and a second linear actuator that is mechanically connected to said third portion and said fourth portion.

17. The inflatable display of claim 7 wherein:

- (a) said inflatable balloon has a first section and a second section; and
- (b) an attachment configuration for attaching and detaching repeatably at least one of said first section and said second section to said closed loop.

18. The inflatable display of claim 1 further comprising an inflator deployed to pump air from outside of said inflatable balloon to inside said inflatable balloon.

19. The inflatable display of claim 1 wherein said inflatable balloon is substantially spherical.

20. The inflatable display of claim 1 further comprising a counterweight that is deployed to counter a turning moment caused by said internal support structure and said projector.

21. The inflatable display of claim 1 further comprising a non-projected image and wherein said inflatable balloon has an outer surface and thereon disposed is said non-projected image.

22. The inflatable display of claim 21 further comprising:

- (a) a light sensor;
- (b) a motor configured to rotate said inflatable balloon; and
- (c) a control system that is configured to control said motor in response to an output of said light sensor in order to turn said non-projected image towards a viewing direction by day and to turn said non-projected image away from a viewing direction by night.

23. A method to control an inflatable display according to wind conditions, the inflatable display comprising an inflatable balloon and a projector disposed inside the balloon, the method comprising the steps of:

- (a) operating in a sensing mode by:
 - (i) sensing for a preset maximum wind speed ; and
 - (ii) maintaining inflation of the inflatable display;
- (b) operating in a collapsing mode by:
 - (i) reducing inflation of the inflatable display; and
 - (ii) collapsing an internal support structure that is mechanically connected to the inflatable display; and
- (c) operating in a recovery mode by:
 - (i) reestablishing said internal support structure; and

- (ii) increasing inflation of the inflatable display.

24. The method of claim 23 wherein said step of collapsing is performed by collapsing an internal support structure that is mechanically connected to the inflatable display by activating at least one linear actuator that is mechanically connected to said internal support structure.

25. The method of claim 23 further comprising, prior to said step of reestablishing, the step of sensing for a wind speed below a second preset maximum.

26. The method of claim 23 further comprising, prior to said step of reestablishing, remotely transmitting a signal to initiate said recovery mode.

27. The method of claim 23 wherein the inflatable display is substantially spherical.

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